

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) An immunotherapeutic composition, ~~comprising~~  
consisting essentially of  
activated, isolated antigen presenting cells (APCs), wherein said APCs are  
obtained from a patient diagnosed with ~~a prostate~~ cancer having a moderate to well  
differentiated cancer grade and a Gleason score of 7 or less and wherein said APCs  
are stimulated by exposure ex vivo to a ~~tumor-associated antigen (TAA)-fusion~~  
protein composed of human prostatic acid phosphatase (huPAP) having the  
sequence identified by SEQ ID NO:1 and human granulocyte-macrophage colony  
stimulating factor (huGM-CSF) having the sequence identified by SEQ ID. NO: 3.

2.-3. (Cancelled).

4. (Original) The immunotherapeutic composition of claim 1 wherein said  
APCs are dendritic cells (DCs).

5.-9. (Cancelled).

10. (Currently amended) The immunotherapeutic composition of claim ~~3~~ 1  
wherein said huPAP is an N-terminal moiety of the fusion protein and said huGM-  
CSF is a C-terminal moiety of the fusion protein, C-terminal moiety is an APC binding  
protein and said N-terminal moiety is a tumor associated antigen (TAA).

11. (Cancelled).

12. (Currently amended) The immunotherapeutic composition of claim 44 10 wherein said fusion protein further comprises, between said N-terminal moiety and said C-terminal moiety, a linker peptide.

13.-20. (Cancelled).

21. (Withdrawn) A method of treating a cancer patient with an immunotherapeutic composition said patient having a cancer with moderately to well-differentiated cancer cells, said method comprising the steps of:

(a) determining in said patient the differentiation state of said cancer cells wherein the presence of moderately to well-differentiated cancer cells indicates a patient susceptible to treatment with an immunotherapeutic composition; and

(b) administering to said patient a therapeutically effective dose of an immunogenic composition, wherein a reduction of 10% indicates an effective treatment of said cancer.

22. (Withdrawn) The method of claim 21 wherein said immunotherapeutic composition is the immunotherapeutic composition of any one of claims 1-18.

23. (Withdrawn) A method of inhibiting growth of a cancer cell in a patient having a moderate to well differentiated cancer grade, said method comprising the steps of:

(a) determining in said patient the grade of said cancer cell wherein a moderate to well differentiated cancer grade indicates a patient susceptible to treatment;

(b) isolating antigen presenting cells (APCs) from a patient having a moderate to well differentiated cancer grade;

(c) stimulating said APCs by exposure ex vivo to an immunotherapeutic composition comprising a protein conjugate comprising an N-terminal moiety and a C-terminal moiety, wherein said APCs are effective to activate T-cells to produce a

cytotoxic cellular response against either said N-terminal moiety or said C-terminal moiety and wherein the level of said T-cell activation is higher than that produced by said APCs when exposed exclusively to said N-terminal moiety or to said 'C-terminal moiety; and

(d) administering to said patient a therapeutically effective dose of said stimulated APCs, wherein a reduction of 10% indicates an effective treatment of said cancer.

24. (Withdrawn) The method of claim 23 wherein said cancer is selected from the group consisting of soft tissue sarcomas, lymphomas, and cancers of the brain, esophagus, uterine cervix, bone, lung, endometrium, bladder, breast, larynx, colon/rectum, stomach, ovary, pancreas, adrenal gland and prostate.

25. (Withdrawn) The method of claim 24 wherein said cancer is prostate cancer.

26. (Withdrawn) The method of claim 25 wherein said cancer grade is determined by Gleason score and wherein said Gleason score is  $< 7$ .

27. (Withdrawn) The method of claim 23 wherein said immunotherapeutic composition is the immunotherapeutic composition of any one of claims 3-18.

28. (Withdrawn) A method of assessing in a cancer patient the susceptibility of the cancer to an immunotherapeutic composition, said method comprising the steps of:

- (a) isolating from said patient a sample containing said cancer cell; and
- (b) determining the differentiation state of said cancer cell; wherein a moderate to well differentiated cancer grade indicates that said cancer cell is susceptible to treatment with an immunotherapeutic composition.

29. (Withdrawn) The method of claim 28 wherein said cancer is selected from the group consisting of soft tissue sarcomas, lymphomas, and cancers of the brain, esophagus, uterine cervix, bone, lung, endometrium, bladder, breast, larynx, colon/rectum, stomach, ovary, pancreas, adrenal gland and prostate.

30. (Withdrawn) The method of claim 28 wherein said immunotherapeutic composition is an immunotherapeutic composition of any one of claims 1-20.